

would have to be present in the comparison study compounds at the same levels found, or at the highest levels expected to be found, in the PCB remediation waste. As another example, for PCB remediation waste which had been solvent washed with liquid amines to remove PCBs, comparison study samples would have to contain concentrations of these amines at the same levels found, or at the highest levels expected to be found, in the PCB remediation waste.

(b) Prior to initiating the comparison study, confirm the following PCB concentrations in the comparison study samples using the methods specified in § 761.292. All samples of non-liquid PCB remediation waste must have PCB concentrations between 0.1 and 150 ppm.

(1) A minimum of three comparison study samples must have PCB concentrations above the cleanup level specified for the site in § 761.61(a)(4) and a minimum of three comparison study samples must have PCB concentrations below the specified cleanup level.

(2) At least one comparison study sample must have a PCB concentration  $\geq 90$  percent and  $\leq 100$  percent of the cleanup level.

(3) At least one comparison study sample must have a PCB concentration  $\geq 100$  percent and  $\leq 110$  percent of the cleanup level.

(c) If the comparison study samples do not have the concentrations or concentration ranges required by paragraph (b) of this section, for purposes of use in this chemical extraction and chemical analysis comparison study, a person may adjust PCB concentrations by dilution. Any excess material resulting from the preparation of these samples, which is not used as an analytical sample, is regulated as the PCB concentration in the component having the highest PCB concentration of the component materials in the sample.

#### **§ 761.326 Conducting the comparison study.**

Extract or analyze the comparison study samples using the alternative method. For an alternative extraction method or alternative analytical method to be comparable to the methods required in § 761.292, all of the following conditions must be met.

(a) All samples having PCB concentrations greater than or equal to the level of concern, as measured by the methods required in § 761.292, are found to be greater than or equal to the level of concern as measured by the alternative method (no false negatives).

(b) Only one sample which contains PCBs at a level less than the level of concern, as measured by the methods required in § 761.292, is found to have a PCB concentration greater than the level of concern as measured by the alternative method (false positive); and all other samples which contain PCBs at levels less than the level of concern, as measured by the methods required in § 761.292, are found by the alternative method to have PCBs less than the level of concern (there are no additional false positives).

#### **Subpart R—Sampling Non-Liquid, Non-Metal PCB Bulk Product Waste for Purposes of Characterization for PCB Disposal in Accordance With § 761.62, and Sampling PCB Remediation Waste Destined for Off-Site Disposal, in Accordance With § 761.61**

SOURCE: 63 FR 35469, June 29, 1998, unless otherwise noted.

#### **§ 761.340 Applicability.**

Use the procedures specified in this subpart to sample the following types of waste when it is necessary to analyze the waste to determine PCB concentration or leaching characteristics for storage or disposal.

(a) Existing accumulations of non-liquid, non-metal PCB bulk product waste.

(b) Non-liquid, non-metal PCB bulk product waste from processes that continuously generate new waste.

(c) Non-liquid PCB remediation waste from processes that continuously generate new waste, that will be sent off-site for disposal.

#### **§ 761.345 Form of the waste to be sampled.**

PCB bulk product waste and PCB remediation waste destined for off-site

## § 761.346

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disposal must be in the form of either flattened or roughly conical piles. This subpart also contains a procedure for contemporaneous sampling of waste as it is being generated.

### § 761.346 Three levels of sampling.

To select a sample of the waste and prepare it for chemical extraction and analysis, there are three required levels of random sampling.

(a) First, select a single 19-liter (5 gallon) portion from a composite accumulated either contemporaneously with the generation of the waste or by sampling an existing pile of waste. Collection procedures for the first level of sampling from existing piles of waste are in § 761.347. Collection procedures for the first level of sampling from a contemporaneous generation of waste are in § 761.348. Compositing requirements and requirements for the subsampling of composite samples to result in a single 19-liter sample are in § 761.350. Send the 19-liter sample to the laboratory for the second and third levels of sampling, including particle size reduction for leach testing and drying as required by § 761.1(b)(4).

(b) Second, at the laboratory, select one quarter of the 19-liter sample. Procedures the laboratory must use for this second level of sample selection appear in § 761.353.

(c) Third, select a 100 gram subsample from the second level subsample. Procedures the laboratory must use for this third level of sample selection appear in § 761.355.

### § 761.347 First level sampling—waste from existing piles.

(a) *General.* Sample piles that are either specifically configured for sampling (see paragraph (b) of this section) or that are of conical shape (see paragraph (c) of this section). If sampling from either of these shapes is not possible, conduct contemporaneous sampling, in accordance with the procedures in § 761.348, or obtain the approval of the Regional Administrator for an alternate sampling plan in accordance with § 761.62(c).

(b) *Specifically configured piles.* A specifically configured pile is a single flattened pile in the shape of a square or rectangle having no restrictions on

length or width but restricted to 30 cm (1 foot) in depth. A square shaped pile facilitates sampling site selection for the first level sample. Select eight 19-liter samples from the pile and composite them into one 19-liter sample as follows:

(1) Divide the pile into quarters.

(2) Divide each of the quarter sections into quarters (i.e., into sixteenths of the original pile).

(3) Select two sixteenths from each of the four quarters, according to one of the two following options:

(i) Randomly select the two sixteenths from one quarter and sample the sixteenths occupying the same positions in each of the other three quarters.

(ii) Randomly select two sixteenths from each of the four quarters (i.e., perform a random selection four different times).

(4) At this point the eight selected sixteenths undergo further division and sample selection. Divide each of the eight selected sixteenths into four equal parts. Using a random number generator or random number table, select one of the four equal parts from each of the eight equal areas. If each of the four equal parts has a volume >76 liters when projected downwards 30 cm, continue to divide each selected area into four equal parts, and select one of the parts, until each selected area has a volume of <76 liters but ≥19 liters. When projected to a depth of 30 cm, a square having a 25 cm side or a circle having a diameter of approximately 28.5 cm equals a volume of approximately 19 liters. The volume of 76 liters is equal to the volume enclosed by a square having a side of 50 cm (or other shape having an area of 250 cm<sup>2</sup>) projected to a depth of 30 cm.

(5) Take one sample of approximately 19 unsorted liters of waste from each of the eight selected areas. Place each sample into a separate 19-liter container, allowing only sufficient space at the top of the container to secure the lid.

(6) Composite the eight 19-liter samples in accordance with § 761.350.

(c) *Conical-shaped piles.* If it is necessary to sample a pile which is too large to be spread on the site to a uniform thickness of 1 foot or 30 cm, or if